United States Environmental Protection Agency Region 4 - Atlanta, Georgia

In the matter of:

Continental Carbon Company,

Phenix City, Alabama

Clean Air Act

Notice of Violation

NOTICE OF VIOLATION

This Notice of Violation (NOV) is issued pursuant to Section 113 of the Clean Air Act (CAA or the Act), as amended, 42 U.S.C. § 7413, to Continental Carbon Company (hereinafter referred to as "Continental Carbon", "Company", or "Respondent") for violations of the CAA at its facility located at 1500 East State Docks Road in Phenix City, Russell County, Alabama (Facility). Section 113 requires the Administrator of the United States Environmental Protection Agency (EPA) to notify a person that has violated a requirement of the applicable state implementation plan (SIP) or permit of such finding of the violation. The authority to issue NOVs has been delegated to the Director of the Air, Pesticides, and Toxics Management Division, EPA, Region 4.

STATUTORY AND REGULATORY BACKGROUND

1. The CAA is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).

A. The National Ambient Air Quality Standards

2. Section 108(a) of the Act, 42 U.S.C. § 7408(a), requires the Administrator of EPA to identify and prepare air quality criteria for each air pollutant, emissions of which may endanger public health or welfare, and the presence of which results from numerous or diverse mobile or stationary sources. For each such "criteria" pollutant, Section 109 of the Act, 42 U.S.C. § 7409, requires EPA to promulgate national ambient air quality standards (NAAQS) requisite to protect the public health and welfare.

- 3. Pursuant to Sections 108 and 109, 42 U.S.C. §§ 7408 and 7409, EPA has identified carbon monoxide (CO), lead, nitrogen oxides (NOx), sulfur dioxide (SO2), ozone, and particulate matter as criteria pollutants, and has promulgated NAAQS for such pollutants. 40 C.F.R. Part 50.
- 4. Under Section 107(d) of the Act, 42 U.S.C. § 7407(d), each state is required to designate those areas within its boundaries where the air quality is better or worse than the NAAQS for each criteria pollutant, or where the air quality cannot be classified due to insufficient data. An area that meets the NAAQS for a particular pollutant is termed an "attainment" area with respect to such pollutant. An area that does not meet the NAAQS for a particular pollutant is termed a "nonattainment" area with respect to such pollutant.
- 5. An area that cannot be classified as either "attainment" or "nonattainment" with respect to a particular pollutant due to insufficient data is termed "unclassifiable" with respect to such pollutant.
- 6. At all times relevant to this NOV, Russell County, the area in which the Facility is located, has been classified as either attainment or unclassifiable for all criteria pollutants.

B. Prevention of Significant Deterioration Regulations

- 7. Part C of Title I of the Act, 42 U.S.C. §§ 7470-7492, sets forth requirements for the prevention of significant deterioration of air quality in those areas designated as either attainment or unclassifiable for purposes of meeting the NAAQS standards. These requirements are designed to protect public health and welfare, to assure that economic growth will occur in a manner consistent with the preservation of existing clean air resources, and to assure that any decision to permit increased air pollution is made only after careful evaluation of all the consequences of such a decision and after public participation in the decision making process. 42 U.S.C. § 7470. These provisions are referred to herein as the "PSD program."
- 8. Section 165(a) of the Act, 42 U.S.C. § 7475(a), among other things, prohibits the construction and operation of a "major emitting facility" in an area designated as attainment or unclassifiable unless a permit has been issued that comports with the requirements of Section 165, including that the facility is subject to the best available control technology (BACT) for each pollutant subject to regulation under the Act that is emitted from the facility.
- 9. Section 169(1) of the Act, 42 U.S.C. § 7479(1), designates carbon black plants (furnace process) which emit or have the potential to emit one

- hundred tons per year or more of any pollutant to be "major emitting facilities."
- 10. Section 169(2)(C) of the Act, 42 U.S.C. § 7479(2)(C), defines "construction" to include "modification" (as defined in Section 111(a) of the Act). "Modification" is defined in Section 111(a) of the Act, 42 U.S.C. § 7411(a), to be "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted."
- 11. Sections 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a) and 7471, require each state to adopt, and submit to EPA for approval, a SIP that contains emission limitations and such other measures as may be necessary to prevent significant deterioration of air quality in areas designated as attainment or unclassifiable.
- 12. EPA has promulgated two largely identical sets of regulations to implement the PSD program. One set, found at 40 C.F.R. § 52.21, contains EPA's own federal PSD program, which applies in areas without a SIP-approved PSD program. The other set of regulations, found at 40 CFR § 51.166, contains requirements that state PSD programs must meet to be approved as part of a SIP.
- 13. Alabama administers a SIP-approved PSD program, which is governed by its PSD rules at Ala. Admin. Code r. 335-3-14-.04.
- 14. The Alabama PSD regulations were originally approved by EPA into the Alabama SIP on November 10, 1981 (46 Fed. Reg. 55517) as Alabama Air Pollution Control Rules and Regulations, Chapter 16.4. Effective June 22, 1989, Alabama's PSD program was recodified at Ala. Admin. Code r. 335-3-14-.04. EPA has approved several amendments to the PSD portion of Alabama's SIP, most recently on December 29, 2010, (75 Fed. Reg. 81863). See 40 CFR § 52.50.
- 15. Alabama's PSD regulations apply to any new major stationary source or any major modification at an existing major stationary source that commences construction after December 10, 1981, and is located in an area designated as attainment or unclassifiable.
- 16. The regulations appearing at Ala. Admin. Code r. 335-3-14-.04 were incorporated into and were a part of the Alabama SIP at the time of the major modifications at issue in this case. All citations to the PSD regulations herein refer to the provisions of the Alabama SIP incorporated into and part of the Alabama SIP as applicable at the time of the major modification alleged herein.

- 17. The PSD regulations set forth in Ala. Admin. Code r. 335-3-14-.04 apply to a new "major stationary source" that intends to construct a "major modification" in an attainment or unclassifiable area. Ala. Admin. Code r. 335-3-14-.04(8).
- 18. Under the PSD regulations, "major stationary source" is defined to include carbon black facilities which emit or have the potential to emit one hundred tons per year or more of any regulated air pollutant. Ala. Admin. Code r. 335-3-14-.04(2)(a)(1).
- 19. Under the PSD regulations, "major modification" is defined as any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the CAA.
- 20. Under the PSD regulations, "net emissions increase" means the amount by which the sum of the following exceeds zero: "any increase in actual emissions from a particular physical change or change in method of operation at a stationary source" and "any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable." Ala. Admin. Code r. 335-3-14-.04(2)(c).
- 21. Under the PSD regulations, a "significant" net emissions increase means an increase in the rate of emissions that would equal or exceed any of the following rates for the following pollutants: 100 tons per year of CO, 40 tons per year of NOx, 40 tons per year of SO2, 40 tons per year of volatile organic compounds (VOC), 10 tons per year of hydrogen sulfide (H2S), 15 tons per year of particulate matter less than 10 micrometers (PM10), 10 tons per year of particulate matter less than 2.5 micrometers (PM2.5), and 10 tons per year of total reduced sulfur (TRS). Ala. Admin. Code r. 335-3-14-.04(2)(w).
- 22. The PSD regulations define "actual emissions" as the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal operation. Ala. Admin. Code r. 335-3-14-.04(2)(u)(1). In addition, for any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date. Ala. Admin. Code r. 335-3-14-.04(2)(u)(3).
- 23. The PSD regulations define "potential to emit" as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and

restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

- 24. Under the PSD regulations, "construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in actual emissions. Ala. Admin. Code r. 335-3-14-.04(2)(h); see also 42 U.S.C. § 7479(2)(C) ("construction" includes the "modification" (as defined in Section 111(a) of the Act, 42 U.S.C. § 7411(a)) of any source or facility).
- 25. No major stationary source or major modification shall begin actual construction unless at a minimum, requirements contained in paragraphs (9) through (17) of Rule 335-3-14-.04, have been met, including, among other things, performance of a source impact analysis, performance of air quality modeling and analysis, application of BACT, and allowance for meaningful public participation in the process. Ala. Admin. Code r. 335-3-14-.04(8).
- 26. No major stationary source or major modification shall begin actual construction or operate without a permit which states that the stationary source or modification will meet the requirements of Ala. Admin. Code r. 335-3-14-.04 (PSD permitting), among other things. Ala. Admin. Code rules 335-3-14-.01 (General Provisions); 335-3-14-.03 (Standards for Granting Permits), and 335-3-14-.04(8) (Review of Major Stationary Source and Major Modification Source Applicability and Exemptions).

C. Title V Program

1. Federal Title V Requirements

- 27. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), provides that no major source or certain other sources may operate without a Title V permit after the effective date of any permit program approved or promulgated under Title V of the Act. EPA first promulgated regulations governing state operating permit programs on July 21, 1992. See 57 Fed. Reg. 32295; 40 C.F.R. Part 70.
- 28. Section 503 of the CAA, 42 U.S.C. § 7661b, sets forth the requirement to submit a timely, accurate, and complete application for a permit, including information required to be submitted with the application.

- 29. Section 504(a) of the CAA, 42 U.S.C. § 7661c(a), requires that each Title V permit include enforceable emission limitations and standards, a schedule of compliance, and other conditions necessary to assure compliance with applicable requirements, including those contained in a state implementation plan. 42 U.S.C. § 7661c(a).
- 30. 40 C.F.R. § 70.1(b) provides that: "All sources subject to these regulations shall have a permit to operate that assures compliance by the source with all applicable requirements." *See also*, Ala. Admin. Code Chapter 335-3-16.
- 31. 40 C.F.R § 70.2 defines "applicable requirement" to include "(1) Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under Title I of the Act that implements the relevant requirements of the Act, including revisions to that plan promulgated in part 52 of this chapter . . ." See also, Ala. Admin. Code r. 335-3-16-.01(c).
- 32. 40 C.F.R. § 70.7(b) provides that no source subject to 40 C.F.R. Part 70 requirements may operate without a permit as specified in the Act. See also, Ala. Admin. Code r. 335-3-16.
- 33. 40 C.F.R. § 70.5(a) and (c) require timely and complete permit applications for Title V permits with required information that must be submitted and 40 C.F.R. § 70.6 specifies required permit content. See also, Ala. Admin. Code r. 335-3-16-.04.
- 34. 40 C.F.R. § 70.5(b) provides that: "Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit." See also, Ala. Admin. Code r. 335-3-16-.04(7).

2. Alabama's Title V Requirements

35. Alabama's Title V program received final interim approval by EPA on December 15, 1995 (See 60 Fed. Reg. 57346), and was granted final full approval by EPA on November 28, 2001, (See 66 Fed. Reg. 54444). See also, 40 C.F.R. Part 70, Appendix A. Applications were due on December 15, 1996 from Alabama sources subject to Title V following EPA's interim approval of Alabama's Title V program.

- 36. The Alabama regulations governing the Title V permitting program are codified at the Ala. Admin. Code, Chapter 335-3-16, and are federally enforceable pursuant to Section 113(a)(3).
- 37. Ala. Admin. Code r. 335-3-16-.02(1) states that any "major source" operating without an Operating Permit may continue to operate only if its owner or operator obtains an Operating Permit prior to a date to be set by the Director.
- 38. Modifications that are significant modifications under Ala. Admin. Code r. 335-3-14-.04 must be incorporated in the Operating Permit using the requirements for sources initially applying for an Operating Permit, including those for applications, public participation, review by affected States, and review by EPA. Ala. Admin. Code r. 335-3-16-.13(4).
- 39. Ala. Admin. Code r. 335-3-16-.04 requires sources to submit timely and complete permit applications for Title V permits with required information and Ala. Admin. Code r. 335-3-16-.05 specifies required permit content.
- 40. Ala. Admin. Code r. 335-3-16-.04(7) requires sources to submit additional information to the Department to supplement or correct an application promptly after becoming aware of the need for additional or corrected information.

FACTUAL BACKGROUND

- 41. Continental Carbon owns and operates a carbon black manufacturing facility in Phenix City, Russell County, Alabama (Facility).
- 42. Continental Carbon is a Delaware corporation. Continental Carbon is hereinafter referred to as "Respondent."
- 43. Respondent is a "person" within the meaning of sections 113(a) and 502 of the CAA, 42 U.S.C. §§ 7413(a) and 7661a, and as defined in section 302(e) of the CAA, 42 U.S.C. § 7602(e).
- 44. The Facility was built in 1971 with one carbon black process unit including two reactors. These two reactors along with various support equipment comprise what is referred to as Unit 1. An additional unit with another two reactors was added in 1998, referred to as Unit 2.
- 45. At the Facility, the Respondent partially combusts and thermally decomposes a heavy oil feed in a low oxygen reactor under controlled conditions, thus producing solid carbon particles which are recovered as the carbon black product. The carbon black is then dried, pelletized, and packaged.

- 46. The Facility is considered a major stationary source for New Source Review purposes because it belongs to one of the 28 named source categories and has the potential to emit the following pollutants in excess of 100 tons per year: CO, NOx, SO2, VOCs, PM and TRS (including H2S).
- 47. Russell County is designated as either attainment or unclassifiable for all criteria pollutants. See 40 C.F.R. § 81.301.
- 48. The Facility currently operates under a Title V Permit (Facility Number: 211-0003) that was issued by ADEM on December 15, 2003, modified on June 4, 2004, and renewed on March 16, 2009.
- 49. By an information request letter issued pursuant to the authority of Section 114 of the Act, 42 U.S.C. § 7414, dated February 29, 2008, EPA required Respondent to submit specific information regarding the Facility.
- 50. Respondent replied to EPA's Section 114 information request with separate submittals on May 30, 2008, and April 29, 2009.

(1) 1993 Debottlenecking Projects - Unit 1

- 51. In or about March 1993 and June 1993, Respondent authorized and implemented several projects to increase production in Unit 1, including but not limited to, the replacement of reactors, a dryer drum, fans, a conveyor system, and physical changes to bag filters.
- 52. The projects described in paragraph 51 were physical changes that in the aggregate resulted in significant net emissions increases of CO, VOC, SO2, and TRS.

(2) Additional Compartment for the Exhaust Bag Filter (EBF) – Unit 1

- 53. In or about January 1996, an additional pulse jet filter compartment for the EBF was approved for purchase, and installed to increase the filter capacity and dryer throughput to achieve higher production rates.
- 54. The project described in paragraph 53 was a physical change that resulted in significant net emissions increases of CO, VOC, NOx, SO2, and TRS.

(3) Oxygen Enrichment Projects - Unit 1

55. In or about May 1996 and August 1996, three projects providing oxygen enrichment for Unit 1 were approved for purchase and installed to increase the oxygen concentration in the combustion air supplying the reactors allowing for an increase in plant capacity.

56. The projects described in paragraph 55 were physical changes that in the aggregate resulted in significant net emissions increases of CO, VOC, NOx, SO2, and TRS.

(4) Dryer Improvements – Unit 2

- 57. In or about May 2003, several design modifications and equipment replacements to the Unit 2 dryer were approved for purchase and installed to increase the unit's production capacity.
- 58. The project described in paragraph 57 was a physical change that resulted in significant net emissions increases of CO, VOC, NOx, SO2, and TRS.

(5) Unit 1 80 Tube Air Preheater Project

- 59. In or about April 2006, two new air preheaters for Unit 1 were approved for purchase and installed. The new preheaters installed were an 80 tube, 800 degree Celsius design versus the 60 tube, 650 degree Celsius design, to save natural gas fuel and liquid oxygen while realizing an increase in yield.
- 60. The project described in paragraph 59 was a physical change that resulted in significant net emissions increases of SO2.

FINDING OF VIOLATIONS

- 61. Upon review of the information provided by Respondent, referenced above in Paragraphs 41 through 60, EPA Region 4 has concluded that Respondent conducted capital projects on carbon black units at the Facility which increased the Facility's capacity to produce carbon black.
- 62. The activities described in Paragraphs 51 through 60 are major modifications that resulted in a significant net emissions increase of CO. VOC, NOx, SO2, and TRS within the meaning of the Clean Air Act, and Ala. Admin. Code r. 335-3-14-.04. Continental Carbon failed to apply for or obtain a PSD permit prior to commencing construction of such activities. Continental Carbon violated and continues to violate Section 165(a) of the Act, 42 U.S.C. § 7475(a), and Ala. Admin. Code r. 335-3-14-.04 by commencing construction of, and continuing to operate, a major modification at its Phenix City Facility without applying for and obtaining a PSD permit. 42 U.S.C. § 7475(a), and Ala. Admin. Code rules 335-3-14-.01 and 335-3-14-.04(8)-(17). Continental Carbon did not install BACT for the control of CO, VOC, NOx, SO2, and TRS prior to commencing construction of such activities, and continues to operate its Phenix City Facility without BACT. Continental Carbon violated and continues to violate Section 165(a) of the Act, 42 U.S.C. § 7475(a), and Ala. Admin.

- Code rules 335-3-14-.01 and 335-3-14-.04 by failing to install and operate BACT for such pollutants. 42 U.S.C. § 7475(a), and Ala. Admin. Code rules 335-3-14-.01 and 335-3-14-.04(9).
- 63. Since 1996, Continental Carbon has failed to submit a timely, accurate, and complete Title V permit application for its Phenix City Facility with information pertaining to the modifications identified in Paragraphs 51 through 60 and with information concerning all applicable requirements, including, but not limited to, the requirement to apply, install, and operate BACT for CO, VOC, NOx, SO2, and TRS at the Phenix City Facility and also failed to supplement or correct the Title V permit applications for this facility in violation of Sections 502, 503, and 504 of the Act, 42 U.S.C. §§ 7661a, 7661b and 7661c; the regulations at 40 C.F.R. Part 70, including, but not limited to, 40 C.F.R. §§ 70.1(b), 70.5, 70.6, and 70.7(b); and the Alabama Title V provisions at Ala. Admin. Code, Chapter 335-3-16.

ENFORCEMENT PROVISIONS

- 64. Sections 113(a)(1) and (3) of the Act, 42 U.S.C. § 7413(a)(1) and (3), provide that the Administrator may bring a civil action in accordance with Section 113(b) of the Act, 42 U.S.C. § 7413(b), whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of, inter alia, the PSD requirements of Section 165(a) of the Act, 42 U.S.C. § 7475(a); Title V of the Act, 42 U.S.C. §§ 7661-7661f, or any rule or permit issued thereunder; or the PSD provisions of the Alabama SIP. See also, 40 C.F.R. § 52.23.
- 65. Section 113(b) of the Act, 42 U.S.C. § 7413(b), authorizes the Administrator to initiate a judicial enforcement action for a permanent or temporary injunction, and/or for a civil penalty of up to \$25,000 per day for each violation occurring on or before January 30, 1997; up to \$27,500 per day for each such violation occurring on or after January 31, 1997 and up to and including March 15, 2004; up to \$32,500 per day for each such violation occurring on or after March 16, 2004 through January 12, 2009; and up to \$37,500 per day for each such violation occurring on or after January 13, 2009, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701, 40 C.F.R. § 19.4, and 74 Fed. Reg. 626 (Jan. 7, 2009), against any person whenever such person has violated, or is in violation of, *inter alia*, the requirements or prohibitions described in the preceding paragraph.
- 66. Section 167 of the Act, 42 U.S.C. § 7477, authorizes the Administrator to initiate an action for injunctive relief, as necessary to prevent the construction, modification or operation of a major emitting facility which does not conform to the PSD requirements in Part C of the Act.

OPPORTUNITY FOR CONFERENCE

Respondent is hereby offered an opportunity for a conference with EPA. The conference will enable Respondent to present evidence bearing on the violations, on the nature of violation, and on any efforts it may have taken or proposes to take to achieve compliance. Respondent has the right to be represented by legal counsel.

A request for a conference must be made within ten (10) days of receipt of this Notice, and the request for a conference or other inquiries concerning the Notice should be made in writing to:

Michiko Kono
Associate Regional Counsel
Office of Regional Counsel, Region 4
U.S. Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street SW
Atlanta, Georgia 30303

If you have any questions, please feel free to call Ms. Kono, at (404) 562-9558, Charlie Garlow, Attorney-Advisor, at (202) 564-1088, or Kellie Ortega, Attorney-Advisor, at (202) 564-5529.

5/24/3.13 Date

Beverly H. Banister

Director

Air, Pesticides, and Toxics
Management Division

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